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English Translation of Amendment under PCT Article 34

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CLAIMS

1. (Amended) A negative photosensitive resin composition for forming projections having a curved surface, comprising an alkali-soluble resin (a), a reactive monomer (b), and a photoreaction initiator (c), wherein 50% or more of a total mass of the blended reactive monomer (b) is a monofunctional reactive monomer.

2. (Amended) The negative photosensitive resin composition for forming projections according to claim 1, wherein a surface shape of the projections is a smoothly curved surface.

3. (Amended) The negative photosensitive resin composition for forming projections according to either claim 1 or claim 2, wherein a height of the projections is within a range from 0.5 to 5 μm.

4. (Amended) The negative photosensitive resin composition for forming projections according to any one of claim 1 through claim 3, wherein precision of the height of the projections is no greater than ± 0.1 μm.

5. (Amended) The negative photosensitive resin composition for forming projections according to any one of claim 1 through claim 4, wherein a proportion of the monofunctional reactive monomer within the total mass of the blended reactive monomer (b) is within a range from 50 to 90% by mass.

6. (Amended) The negative photosensitive resin composition for forming projections according to claim 5, wherein a proportion of the monofunctional reactive monomer within the total mass of the blended reactive monomer (b) is within a range from 60 to 85% by mass.

7. (Amended) The negative photosensitive resin composition for forming projections according to claim 6, wherein a proportion of the monofunctional reactive monomer within the total mass of the blended reactive monomer (b) is within a range from 70 to 80% by mass.

8. (Amended) A negative photosensitive resin composition for forming projections for controlling liquid crystal alignment, comprising an alkali-soluble resin (a), a reactive monomer (b), and a photoreaction initiator (c), wherein 50% or more of a total mass of the blended reactive monomer (b) is a monofunctional reactive monomer.

9. (New) The negative photosensitive resin composition for forming projections for controlling liquid crystal alignment according to claim 8, wherein a surface shape of the projections is a smoothly curved surface.

10. (New) The negative photosensitive resin composition for forming projections for controlling liquid crystal alignment according to either claim 8 or claim 9, wherein a height of the projections is within a range from 0.5 to 5 μm.

11. (New) The negative photosensitive resin composition for forming projections for controlling liquid crystal alignment according to any one of claim 8 through claim 10, wherein precision of the height of the projections is no greater than ± 0.1 μm.

12. (New) The negative photosensitive resin composition for forming projections for controlling liquid crystal alignment according to any one of claim 8 through claim 11, wherein a proportion of the monofunctional reactive monomer within the total mass of the blended reactive monomer (b) is within a range from 50 to 90% by mass.

13. (New) The negative photosensitive resin composition for forming projections for controlling liquid crystal alignment according to claim 12, wherein a proportion of the

monofunctional reactive monomer within the total mass of the blended reactive monomer (b) is within a range from 60 to 85% by mass.

14. (New) The negative photosensitive resin composition for forming projections for controlling liquid crystal alignment according to claim 13, wherein a proportion of the monofunctional reactive monomer within the total mass of the blended reactive monomer (b) is within a range from 70 to 80% by mass.

15. (New) A negative photosensitive element, comprising a negative photosensitive resin composition layer that uses either the negative photosensitive resin composition for forming projections according to any one of claim 1 through claim 7, or the negative photosensitive resin composition for forming projections for controlling liquid crystal alignment according to any one of claim 8 through claim 14, positioned on top of a support.

16. (New) A method of producing projections having a curved surface, comprising at least:

(I) a step of layering either the negative photosensitive resin composition according to any one of claim 1 through claim 14, or the negative photosensitive resin composition layer of the negative photosensitive element according to claim 15 onto a substrate, thereby forming a negative photosensitive resin composition layer on top of the substrate,

(II) a step of patterning the negative photosensitive resin composition layer by irradiation with an activation light beam,

(III) a step of generating a resin pattern by developing, and

(IV) a step of heating the resin pattern.

17. (New) A method of producing projections for controlling liquid crystal alignment, comprising at least:

(I) a step of layering either the negative photosensitive resin composition according to any one of claim 1 through claim 14, or the negative photosensitive resin composition layer of the negative photosensitive element according to claim 15 onto a substrate, thereby forming a negative photosensitive resin composition layer on top of the substrate,

(II) a step of patterning the negative photosensitive resin composition layer by irradiation with an activation light beam,

(III) a step of generating a resin pattern by developing, and

(IV) a step of heating the resin pattern.

18. (New) A method of producing projections for controlling liquid crystal alignment, comprising at least:

(I) a step of layering either the negative photosensitive resin composition according to any one of claim 1 through claim 14, or the negative photosensitive resin composition layer of the negative photosensitive element according to claim 15 onto a substrate, thereby forming a negative photosensitive resin composition layer on top of the substrate,

(II) a step of patterning the negative photosensitive resin composition layer by irradiation with an activation light beam,

(III) a step of generating a resin pattern by developing, and

(IV) a step of generating projections having smoothly curved surfaces by heating.

19. (New) Projections having curved surfaces, produced using the method according to claim 16.

20. (New) Projections for controlling liquid crystal alignment, produced using the method according to either claim 17 or claim 18.

21. (New) A substrate having either the projections having curved surfaces according to claim 19, or the projections for controlling liquid crystal alignment according to claim 20.

22. (New) A liquid crystal panel that is produced using the substrate having projections for controlling liquid crystal alignment according to claim 21.